

electrically conductive current reversal segments fastened on said outer cover, said segments having segmental surfaces resting on said jacket surface and having first and second opposite ends;

bent, planar positioning members extending from said opposite ends;

a stud extending from one of said ends providing a coil winding connection; and

corresponding recesses on said front surface receiving said positioning members;

whereby said positioning members and said corresponding recesses interact for

positioning and orienting said segments on said outer cover.

17. A commutator according to claim 16 wherein

two of said positioning members have lugs extending at a right angle from ends of said positioning members remote from said segmental surface and extending over a plane of said front surface.

18. A commutator according to claim 16 wherein

said segments are fastened on said outer cover by a bonding layer between said segments and said outer cover.

19. A commutator according to claim 18 wherein

said bonding layer is an adhesive layer selected from the group consisting of epoxy resin, polyurethane resin and phenol resin.

20. A commutator, comprising

a preformed, generally cylindrical outer cover having an axis of rotation and a core;

a cup-shaped connector having a frontal member with a keyhole-shaped recess and mounted on said outer cover;

electrically conductive current reversal segments fastened on said connector with said connector mounted between said segments and said outer cover by a bonding agent; and

a projection on said core corresponding to and received in said recess to fasten said connector to said core by a clamping action.

21. A commutator according to claim 20 wherein

said bonding agent is an insulating bonding layer.

22. A commutator according to claim 20 wherein

said bonding agent is an electrically conductive bonding layer.

23. A commutator according to claim 22 wherein

said bonding layer is selected from the group consisting of adhesive, solder or welding material.

24. A commutator according to claim 20 wherein

said segments comprise a carbon containing circular segmental disk fastened by a bonding agent on a surface of said frontal member of said connector remote from said outer

cover, said disk being isolated into said segments by cuts in said disk extending radially relative to said axis of rotation.

25. A commutator according to claim 24 wherein
said bonding agent is a soldered layer.

26. A commutator according to claim 25 wherein
said soldered layer is selected from the group consisting of soft, hard and glass solder
layers.

27. A commutator according to claim 24 wherein
said bonding layer is a welded layer.

28. A commutator according to claim 27 wherein
said welded layer is selected form the group consisting of ultrasound, friction and
electrode welded layers.

29. A process for manufacturing a commutator, comprising the steps of:
preforming a generally cylindrical outer cover;
fastening a plurality of electrically conductive current reversal segments simultaneously
to the outer cover, with segmental surfaces of the segments resting on a jacket surface of the
outer cover;

positioning and orienting said segments on said outer cover by receiving bent, planar positioning members extending from opposite ends of said segments in corresponding recesses on a front surface of the outer cover; and

forming a stud extending from one of the ends of the segments to provide a coil winding connection.

30. A process according to claim 29 wherein

all of the segments are delivered simultaneously to the outer cover.

31. A process for manufacturing a commutator, comprising the steps of:

performing a generally cylindrical outer cover;

mounting a cup-shaped connector having a frontal member with a keyhole-shaped recess on the outer cover;

fastening a plurality of electrically conductive current reversal segments simultaneously on the connector with the connector being mounted between the segments and the outer cover by a bonding agent; and

receiving a projection on a core of the outer cover in the recess to fasten the connector to the core by a clamping action.

32. A process according to claim 31 wherein

all of the segments are delivered simultaneously to the outer cover.